Copies of any bulletin may be ordered by calling the Section of Epidemiology at (907) 269-8000 or by writing to us at PO Box 240249, Anchorage, Alaska 99524-0249

# Bulletin No. 3 January 13, 1997 Cardiovascular Disease in Alaska

Cardiovascular disease (CVD) is of major public health importance because it affects a large number of people, and because many interventions have been shown to decrease morbidity and mortality from CVD. February is "Heart Month" which provides the opportunity to alert Alaskans about the problem of CVD and provide them with opportunities for cardiovascular health education.

#### Mortality from CVD in Alaska

Each year, approximately **670** Alaskans die of cardiovascular disease. The major components of CVD, heart disease and stroke, account for 26.7% of all Alaska deaths.

CVD is not just a disease of the elderly. Coronary heart disease kills a substantial number of relatively young people, especially men, in their most productive years of life. In Alaska, 35% of all coronary heart disease deaths occur among people under age 65 years.

In 1950 the major cause of death among Alaska Native people was infectious diseases, and the mortality rate from CVD was much higher among non-Native people than among Native people (Table 1).<sup>3</sup> By the 1980's, cancer, heart disease and injuries had become the leading causes of death among Alaska Natives as well as among non-Natives. Furthermore, the CVD rate has fallen dramatically among non-native people so that Alaska Natives now have higher CVD mortality rates than do non-Natives (Table 1).<sup>4</sup>

Table 1. Age-adjusted mortality rates\* per 100,000 population from heart disease and atherosclerosis among Alaska Natives and non-Natives

	<u>1950</u>	<u>1992-94</u>	
	Deaths per 100,000		
Alaska Natives	143.5	141.7	
Non-Natives	435.2	131.6	

<sup>\*</sup>Age-adjusted to U.S. 1940 population; ICD-9 codes 390-429, 440-458

Alaska's mortality rate from heart disease is lower than that for the U.S., whereas the mortality rate for stroke is similar to the U.S. rate (Table 2).

Table 2. Age-adjusted mortality rates\* per 100,000 population for heart disease and stroke, 1994

	<u>Heart Disease</u>	<u>Stroke</u>
	Deaths per 100,000	
Alaska <sup>4</sup>	120.5	27.3
U.S. <sup>5</sup>	140.0	26.7

<sup>\*</sup>Age-adjusted to U.S. 1940 population; ICD-9 codes for heart disease 390-398,402,404-429; for stroke 430-438.

## Risk Factors for CVD

Mortality from heart disease has been declining in Alaska and in the U.S. during the past several decades. Despite the fact that mortality is decreasing, data from Alaska's Behavioral Risk Factor Surveillance System indicates that a substantial proportion of Alaskans remain at risk for CVD (Table 3). Among Alaska adults, 28.9% smoke cigarettes, 48.2% have a sedentary lifestyle, 28.2% are overweight, and only 18.8% eat five fruits and vegetables per day. Furthermore, there are gaps in our knowledge about risk factors in the population. Although we know that 92.5% of adult Alaskans have had their blood pressure checked in the past 2 years, we have no information about how many with hypertension have their blood pressure under control. Similarly, we know that 62.1% of adult Alaskans have been screened for cholesterol in the past 5 years, but we do not know how many are being treated or how they responded to treatment.

Table 3. Prevalence of CVD risk factors and behaviors among Alaska adults aged 18 years and older, 1993-1994

CVD Risk Factor/Behavior	Percent of adults
Current cigarette smoker <sup>6</sup>	28.9%
Sedentary lifestyle <sup>6</sup>	48.2%
Overweight <sup>6</sup>	28.2%
Eat 5 fruits and vegetables per day <sup>6</sup>	18.8%
Have high blood pressure <sup>7</sup>	17.2%
Ever told have diabetes <sup>6</sup>	3.1%
Blood pressure screen within past 2 yrs <sup>7</sup>	92.5%
Cholesterol screen within past 5 years <sup>7</sup>	62.1%

## Discussion

The Alaska Division of Public Health is working with a group of interested individuals and agencies to develop a statewide plan for the prevention and control of CVD. In Alaska, we would like to develop a plan with the following characteristics: 1) relevant for the entire state, including all areas and all race/ethnic groups; 2) action oriented; 3) based on interventions known to be effective, and 4) emphasis on CVD prevention rather than treatment. The plan will deal with a number of important issues, including:

- Systems issues (Leadership/coordination/collaboration, legislation, funding)
- Education (Public education, provider education, media)
- Comprehensive School Health
- Special Populations (Rural Alaska, women)
- Healthy Lifestyles
- Data/Surveillance/Health Outcome Monitoring

Individuals interested in participating in development of the plan can contact Dr. Catherine Schumacher in the Section of Epidemiology. Those interested in learning more about Heart Month can contact Tracy McFall at the American Heart Association, Alaska Affiliate at 563-3111 ext. 24.

- 1. Smith CA, Pratt M. Cardiovascular disease. In: Brownson RC, Remington PL, Davis JR. eds. Chronic Disease Epidemiology and Control. Washington, DC: American Public Health Association; 1993.

  2. Alaska Bureau of Vital Statistics, 1994 Annual Report, Alaska Division of Public Health.

  3. Causes of Death in Alaska, 1950, 1980-89: An analysis of the causes of death, years of potential life lost and life expectancy. Section of Epidemiology, Alaska Division of Public Health.

  4. Alaska Mortality Data, Section of Epidemiology and Bureau of Vital Records, Alaska Division of Public Health.

  5. National Center for Health Statistics. Healthy People 2000 Review 1995-96. Hyattsville, MD: Public Health Service; 1996.

  6. 1994 Annual Report: Alaska Behavioral Risk Factor Survey. Section of Community Health Services/EMS, Alaska Division of Public Health; Nov. 1996.

  7. 1993 Annual Report: Alaska Behavioral Risk Factor Survey. Section of Community Health Services/EMS, Alaska Division of Public Health; Sept. 1995.

(Submitted by Catherine Schumacher, MD, MSPH, Chronic Disease Program, Section of Epidemiology)